



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,960	12/31/2003	Nicole L. Blankenbeckler	HT3980 US NA	8572
23906	7590	08/10/2005	EXAMINER	
E I DU PONT DE NEMOURS AND COMPANY LEGAL PATENT RECORDS CENTER BARLEY MILL PLAZA 25/1128 4417 LANCASTER PIKE WILMINGTON, DE 19805			MATZEK, MATTHEW D	
			ART UNIT	PAPER NUMBER
			1771	

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

h

Office Action Summary	Application No. 10/749,960	Applicant(s) BLANKENBECKLER ET AL.	
	Examiner Matthew D. Matzek	Art Unit 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/2/04, 10/21/04</u> . | 6) <input checked="" type="checkbox"/> Other: <u>IDS: 12/1/04</u> . |

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-16, drawn to a structure for cooking or heating food, classified in class 442, subclass 394.
- II. Claim 17, drawn to a method of heating food, classified in class 426, subclass 234.

The inventions are distinct, each from the other because of the following reasons:

1. Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the structure may also be used to draw away heat from the food when the structure and food are put in a cold environment (i.e. refrigerator/freezer).
2. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Art Unit: 1771

4. During a telephone conversation with Andrew Golian on 7/21/2005 a provisional election was made with traverse to prosecute the invention of Group 1, claims 1-16.

Affirmation of this election must be made by applicant in replying to this Office action.

Claim 17 is withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-4 and 6-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Blankenbeckler et al. (US 2004/0173607) ('607).

The applied reference has a common Assignee with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art

Art Unit: 1771

under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

a. '607 teaches a microwave material comprising a substrate or base layer of aramid paper or KEVLAR® aramid fibers, and layer of microwaveable coating comprising carbon black and modified soy protein (Abstract, 0024, 0026 and 0031). The Examiner takes the position that para-aramid is the equivalent of either aramid and/or KEVLAR® aramid fibers and as such the limitation set forth in claim 4 is met by the prior art. The microwaveable coating covers the entire substrate or covers an entire substrate surface except for areas adjacent edges of the substrate [0026]. The applied art does not teach the glass transition temperature or the melting temperature of the aramid fibers, however as the art meets the instant limitation set forth in claim 3 it necessarily meets the physical limitations of instant claim 1. The applied art does not teach that the aramid paper is nonwoven, however it is well known in the art that the limitation of paper provides sufficient limitation to include nonwovens.

7. Claims 1-2, 6 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Pollart et al. (5,410,135) ('135).

a. '135 teaches a self-limiting microwave heating material comprising a coating of cellulosic polymer matrix and carbon black covering a paper substrate (Abstract, col. 12, lines 49-62, col. 11, lines 64-70, col. 10, lines 53-58). The

Art Unit: 1771

applied art does not teach the glass transition temperature or the melting temperature of the paper or paperboard, however as the art meets the instant limitation set forth in claim 2 it necessarily meets the physical limitations of instant claim 1. The substrate is preferably dimensionally stable at the operating temperature of the microwave reactive material (col. 12, lines 63-68). The applied art does not teach that the paper is nonwoven, however it is well known in the art that the limitation of paper provides sufficient limitation to include nonwovens. Claim 28 recites that the coating is applied in patterns on the paper substrate. The coating composition may be coated upon any substrate (col. 12, lines 49-51).

8. Claims 1 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Seaborne (US 5,183,787) ('787).

a. '787 teaches a microwave susceptor material comprises a microwave absorbing material (carbon particles) and binder overlaying a nonwoven reinforcing fabric (col. 2, lines 3-7, col. 3, lines 43-52, col. 7, lines 14-25). An embodiment uses sodium silicate as the binder (col. 10, lines 36-51).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1771

9. Claim 7 rejected under 35 U.S.C. 103(a) as being unpatentable over Pollart et al. (US 5,410,135) as applied to claim 1 above. The applied prior art is silent as to the use of continuous coating of the microwaveable coating.

a. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the article of Pollart et al. with a continuous coating of cellulosic polymer and carbon black. The skilled artisan would have been motivated by the desire to protect the underlying substrate from staining or infiltration of water/liquids and offer uniform heating across the surface of the article.

10. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pollart et al. (US 5,410,135) as applied to claim 1 above, and further in view of Fisher et al. (US 4,892,782). The article of Pollart et al. is silent as to the use of spunlaced or aramid fabric for use as the substrate of the microwaveable article.

a. Fisher et al. teach a fibrous microwave susceptor packaging material comprising nonwoven fibers coated with susceptor materials (Abstract). The substrates may be made of aramid fibers, KEVLAR ® aramid fibers or spunlaced fabric (col. 3, lines 20-30). The Examiner takes the position that para-aramid is the equivalent of either aramid and/or KEVLAR ® aramid fibers and as such the limitation set forth in claim 4 is met by the prior art.

b. Since Pollart et al. and Fisher et al. are from the same field of endeavor, (i.e. microwave susceptor materials), the purpose disclosed by Fisher et al. would have been recognized in the pertinent art of Pollart et al.

Art Unit: 1771

c. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the article of Pollart et al. with the motivation of using non-melting or high-temperature resistant fibrous substrates to withstand the high temperatures achieved during microwave cooking (col. 3, lines 40-45, Fisher et al.)

11. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seaborne (US 4,806,718) as applied to claim 1 above. The applied prior art is silent as to the continuity of the microwaveable coating.

a. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to make the article of Seaborne with a continuous or discontinuous coating of silicate binder and carbon particles. The skilled artisan would have been motivated to make a continuous coating by the desire to protect the underlying substrate from staining or infiltration of water/liquids and offer uniform heating across the surface of the article or make a discontinuous coating with the desire to create a thermal gradient across the article to selectively heat a specified area.

12. Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seaborne (US 4,806,718) as applied to claim 1 above, and further in view of Fisher et al. (US 4,892,782). The article of Seaborne is silent as to the use of paper, spunlaced or aramid fabric for use as the substrate of the microwaveable article.

a. Fisher et al. teach a fibrous microwave susceptor packaging material comprising nonwoven fibers coated with susceptor materials (Abstract). The

substrates may be made of paper, aramid fibers, KEVLAR ® aramid fibers or spunlaced fabric (line 3, col. 20-30). The Examiner takes the position that para-aramid is the equivalent of either aramid and/or KEVLAR ® aramid fibers and as such the limitation set forth in claim 4 is met by the prior art.

b. Since Seaborne and Fisher et al. are from the same field of endeavor, (i.e. microwave susceptor materials), the purpose disclosed by Fisher et al. would have been recognized in the pertinent art of Seaborne.

c. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the article of Seaborne with the motivation of using non-melting or high-temperature resistant fibrous substrates to withstand the high temperatures achieved during microwave cooking (col. 3, lines 40-45, Fisher et al.).

13. Claims 1, 2, 6-10, 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shanton (US 6,066,375) ('375).

a. '375 teaches a coated microwaveable container (Abstract). The container comprises a paper, nonwoven or laminate of the two as a substrate, which is coated with a sizing agent such as starch, animal glue or cellulosic polymers (col. 12, lines 7-14 and col. 14, lines 48-53). The Examiner equates the sizing layer to the intermediate layer. The microwave susceptor layer is coated on top of the intermediate layer (Abstract). This layer comprises carbon powder and a binder (col. 10, lines 1-9). The article of Shanton is silent as to the use of a silicate or a naturally occurring polymer or a derivative thereof for use in the microwave

susceptor layer. The applied prior art is silent as to the continuity of the microwaveable coating.

b. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the susceptor layer to comprise starch, animal glue or cellulosic polymers as the binder with the motivation of using common materials throughout the article for cost reduction and consistency throughout the article.

c. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to make the article of Shanton with a continuous or discontinuous coating of binder and carbon particles. The skilled artisan would have been motivated to make a continuous coating by the desire to protect the underlying substrate from staining or infiltration of water/liquids and offer uniform heating across the surface of the article or make a discontinuous coating with the desire to create a thermal gradient across the article to selectively heat a specified area.

14. Claims 3-5 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shanton (US 6,066,375) as applied to claims 1 and 9 above, and further in view of Fisher et al. (US 4,892,782). The article of Shanton is silent as to the use of spunlaced or aramid fabric for use as the substrate of the microwaveable article.

a. Fisher et al. teach a fibrous microwave susceptor packaging material comprising nonwoven fibers coated with susceptor materials (Abstract). The substrates may be made of aramid fibers, KEVLAR ® aramid fibers or spunlaced

Art Unit: 1771

fabric (line 3, col. 20-30). The Examiner takes the position that para-aramid is the equivalent of either aramid and/or KEVLAR ® aramid fibers and as such the limitation set forth in claim 4 is met by the prior art.

b. Since Shanton and Fisher et al. are from the same field of endeavor, (i.e. microwave susceptor materials), the purpose disclosed by Fisher et al. would have been recognized in the pertinent art of Shanton.

c. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the article of Shanton with the motivation of using non-melting or high-temperature resistant fibrous substrates to withstand the high temperatures achieved during microwave cooking (col. 3, lines 40-45, Fisher et al.).

Conclusion

15. The references listed by Applicant on the provided Search Report that have not been relied upon by Examiner fail to meet the limitations set forth in the instant independent claims 1 and 9.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew D. Matzek whose telephone number is (571) 272-2423. The examiner can normally be reached on 8:30 am - 5:00 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1771

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mdm

mdm


NORCA TORRES
PRIMARY EXAMINER